Course: Chemistry of Polymers and Organic Materials

Location: ABB 163, Mondays 8:30-10:20, Thursdays 8:30-9:20

Instructor: Dr. Mike Brook (Office ABB 459; email: mabrook@mcmaster.ca)

Office Hours: by appointment

Objectives: Relate chemical principles to a new category of compounds - polymers
To reinforce industrially important organic chemistry
To develop a feeling for polymer structure versus property relationships
To provide an introduction for advanced courses.
A tool box of knowledge for the workplace
Selected special topics
  • How do improve strength of polyethylene
  • How to make biocompatible surfaces

Textbook: Polymer Chemistry, An Introduction (Oxford) by Malcolm P. Stevens – coverage of this book is given on the detailed list of topics.

Assignments: There will be a total of 2 assignments posted during the semester. They will be due two weeks from the day they are posted:

<table>
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<tr>
<th>Assignment</th>
<th>Posted</th>
<th>Due</th>
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<tbody>
<tr>
<td>1</td>
<td>Sept. 28</td>
<td>Oct. 8</td>
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<td>2</td>
<td>Nov. 5</td>
<td>Nov. 16,19</td>
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Midterm: There will be one midterm, during the class, on Thursday, Oct. 29th.

Final Exam: The final exam (3 hours) will cover material from the entire course.

Mark Breakdown:
Assignments: 30%
Midterm: 20%
Final Exam: 50%

Notes: 1. Any assignments, tests or exams written in pencil will not be eligible for re-grading. 2. The mark value of any missed tests or assignments (with acceptable excuse, as per the Dean’s office) will be added to the value of the final exam.

Prerequisite: Chem 2OD3 or equivalent. A general knowledge of organic chemistry will be assumed.

Website: Information on the course (including class notes, assignments, solutions, etc.) will be posted on McMaster’s Avenue system. A discussion board will also be available for you to post questions and answer questions from your peers.
McMaster’s Policy on Academic Dishonesty

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g., a grade of zero on an assignment, loss of credit with a notation on transcript and/or suspension or expulsion from university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3: http://www.mcmaster.ca/senate/academic/ac_integrity.htm

The following illustrates only three forms of academic dishonesty most relevant to experimental research and scientific ethical behavior:

1. Plagiarism: Submission of work (e.g., report, manuscript, presentation) that is not one’s own work or for which other credit (e.g., citation, permission) has not been obtained. Transcribing passages from other references in lab reports is an example.

2. Fraudulent Data: The intentional use of fraudulent, inauthentic and misleading data in experimental research that cannot be reproduced independently by other groups; submitting data collected by someone else and passing it off as your own.

3. Improper Collaboration: Taking credit for work performed in a group without reasonable and/or equitable effort consistent with other members of the group.

The university requires that every act of academic dishonesty be reported and subjected to a penalty depending on specific context.

To avoid any conflicts with this policy:
- Limit any discussion of academic work with your peers, avoiding specific details of assignments or laboratory reports (unless instructed otherwise)
- Record authentic data and all observations during an experiment in an unaltered laboratory notebook as a permanent record.
- Consult your instructors or TAs in case of any doubts in these matters

Note: The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.